REMARKS

Reexamination and reconsideration of the application as amended are requested. Claims 5 and 6 have been written in independent form. Claim 7 has been canceled. Support for amended claim 1 is found from canceled claim 4 and from claims 5 and 6. Applicants believe there is a typographical error in the Office Action Summary which states that claims 1-21 are rejected because the Detailed Action states that claims 6, 12-15, 20 and 21 are allowed.

The Examiner's rejection of claims 1, 2, 5 and 8-11 as being "anticipated", under 35 U.S.C. 102, is respectfully traversed. The examiner rejects these claims as being unpatentable over Karpinski.

The Examiner has not identified the patent number of the Karpinski patent (or supplied Applicants with a copy thereof) in any Office Action, and Applicants request that the Examiner make the patent number of the Karpinski patent of record. Applicants, from a computer search of Karpinski patents on the USPTO website have identified the Examiner's Karpinski patent as U.S. Patent No. 6,512,365.

Regarding claims 1 and 2, Karpinski '365 discloses a sensor S which measures the rotation of a target wheel 60 (see column 4, lines 4-5 and column 5, lines 61-65). The target wheel 60 is attached to race 22 which is attached to spindle 12 of the rotatable hub assembly A. The sensor S is attached to the nonrotatable housing 4. It is noted that the target wheel 60 is a different component from the rolling elements 40. The sensor S of Karpinski '365 does not sense the passage of the rolling elements 40. The sensor S of Karpinski '365 is not a stress-based load sensor, a distance-measuring sensor, and/or a rolling-element-passage-sensing senso. Claim 1 requires at least one sensor including a stress-based load sensor, a distance-measuring sensor, and/or a rolling-element-passage-sensing sensor. Claim 2 depends from claim 1.

Regarding claims 5 and 8-11, as previously mentioned, the sensor S of Karpinski '365 does not sense the passage of the rolling elements around the raceway past the sensor as required by Applicants' claims 5 and 8. Claims 9-11 depend from claim 8. It is noted that the speed of the rolling elements, measured in one implementation of Applicants sensor 616, is not the same

as the wheel speed, measured by Karpinski's sensor S (see the specification, page 11, lines 9-18 for how rolling element speed and wheel speed are measured by separate sensors and are used together to determine force).

The Examiner's rejection of claims 3, 4 and 16-19 as being "obvious", under 35 U.S.C. 103, is respectfully traversed. The examiner rejects these claims as being unpatentable over Karpinski in view of Joki. Claim 3 and 4 depend from claim 1, and Applicants' previous remarks concerning the patentability of claim 1 over Karpinski '365 are herein incorporated by reference. Claims 17-19 depend from claim 16.

Claim 16 requires that the at-least-one sensor measure temperature and that the output of the at-least-one sensor be used without any non-temperature sensor output for determining at least one component of force. Joki determines force using the output of two sensors. One of Joki's two sensors is a temperature sensor which counteracts and offset changes in resistance of a strain sensor 38 cause by temperature variations alone. The other of Joki's two sensors is the strain sensor 38. See column 4, lines 53-63 of Joki. Thus, Joki does not use a temperature sensor without any non-temperature sensor for determining force, as required by Applicants' claims 16-19.

Inasmuch as each of the rejections has been answered by the above remarks and amended claims, it is respectfully requested that the rejections be withdrawn, and that this application be passed to issue.

Respectfully submitted,

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